

What is claimed is:

1. A remote, self-contained communications antenna apparatus for establishing wireless communications, comprising:
  - (a) a vehicle; and
  - 5 (b) attached to said vehicle, equipment for
    - (i) transceiving wireless communication signals between said equipment and a disconnected cell site, and
    - (ii) transceiving wireless communication signals between said equipment and a communications network.
- 10 2. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are transceived at 806-960 MHz.
3. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are transceived at 1710-1855 MHz.
4. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are transceived at 2500-2690 MHz.
- 15 5. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are transceived at 2.4-2.5 GHz.
6. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are for wireless paging devices.
- 20 7. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site are for digital processing devices.
8. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said disconnected cell site comprise any frequency signal in the electromagnetic spectrum.
- 25 9. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said communications network unit are transceived at 806-960 MHz.
10. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said communications network unit are transceived at 1710-1855 MHz.
11. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said communications network unit are transceived at 2500-2690 MHz.
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12. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said communications network unit are transceived at 2.4-2.5 GHz.
13. The apparatus of claim 1, wherein said wireless communication signals between said equipment and said communications network unit comprise any frequency signal in  
5 the electromagnetic spectrum.
14. The apparatus of claim 1, wherein said communications network comprises a celestial communications network.
15. The apparatus of claim 1, wherein said communications network comprises a terrestrial communications network.
- 10 16. The apparatus of claim 1, wherein said disconnected cell site transceives wireless communication signals with a wireless device.
17. The apparatus of claim 16, wherein said wireless device comprises at least one of the following:
  - (a) a phone;
  - 15 (b) a computer;
  - (c) a modem;
  - (d) a pager;
  - (e) a personal data assistant;
  - (f) a global positioning system receiver; and
  - 20 (g) an interactive television.
18. The apparatus of claim 1, wherein said equipment comprises one or more of the following:
  - (a) a power source for providing power to said remote, self-contained communications antenna apparatus;
  - 25 (b) a backup power source for providing backup power to said remote, self-contained communications antenna apparatus;
  - (c) a charging source for
    - (1) charging said power source, and
    - (2) charging said backup power source;
  - 30 (d) transceiving equipment for

- (i) transmitting and receiving said wireless communication signals between said equipment and said disconnected cell site, and
  - (ii) transmitting and receiving said wireless communication signals between said equipment and said communications network;
- 5 (e) network interface equipment for
  - (i) processing said wireless communication signals between said equipment and said disconnected cell site, and
  - (ii) processing said wireless communication signals between said equipment and said communications network;
- 10 (f) a control unit for
  - (i) managing said wireless communication signals between said equipment and said disconnected cell site, and
  - (ii) managing said wireless communication signals between said equipment and said communications network;
- 15 (g) a data storage unit for storing data associated with
  - (i) said wireless communication signals between said equipment and said disconnected cell site, and
  - (ii) said wireless communication signals between said equipment and said communications network;
- 20 (h) a mast for extending and collapsing an antenna of said transceiving equipment;
  - (i) environmental control equipment for controlling temperature; and
  - (j) stabilizing equipment to secure and balance the attachment of said equipment to said vehicle.
- 25 19. The apparatus of claim 18, wherein said control unit comprises a personal computer.
- 20. The apparatus of claim 18, wherein said vehicle comprises a non-motorized vehicle.
- 21. The apparatus of claim 20, wherein said motorized vehicle comprises a trailer.
- 22. The apparatus of claim 18, wherein said vehicle comprises a motorized vehicle.
- 23. The apparatus of claim 22, wherein said charging source further charges said
- 30 motorized vehicle.

24. The apparatus of claim 18, wherein said mast comprises an extendible mast.
25. The apparatus of claim 18, wherein said signal processor comprises a digital signal processor.
26. The apparatus of claim 18, wherein said signal processor comprises an analog signal processor.
- 5 27. The apparatus of claim 18, wherein said power source comprises at least one of the following:
- (a) a gasoline-powered generator;
  - (b) a solar-powered generator; and
  - 10 (c) an electrical-powered generator.
28. The apparatus of claim 18, wherein said network interface unit communicates with a customer service unit of said disconnected cell site using wireless communications.
29. The apparatus of claim 18, wherein said network interface unit communicates with a customer service unit of said disconnected cell site using a wired medium.
- 15 30. A remote, self-contained communications antenna apparatus for establishing wireless communications, comprising:
- (a) a vehicle; and
  - (b) attached to said vehicle, equipment for
    - (i) transceiving wireless communication signals between said
    - 20 equipment and a cellular system, and
    - (ii) transceiving wireless communication signals between said cellular system and a communications network.
31. The apparatus of claim 30, wherein said cellular system comprises a cellular switch.
32. The apparatus of claim 30, wherein said cellular system comprises a remote cell site.
- 25 33. The apparatus of claim 30, wherein said cellular system comprises a cell site.
34. The apparatus of claim 30, wherein said cellular system comprises a disconnected cell site.
35. A method for establishing wireless communications, comprising:
- (a) transceiving wireless communication signals between a wireless device
  - 30 and a disconnected cell site; and

(b) transceiving wireless communication signals between said disconnected cell site and a remote, self-contained communications antenna apparatus; and

(c) transceiving wireless communication signals between said remote, self-contained communications antenna apparatus and a communications network.

5 36. A method for establishing wireless communication, comprising:

(a) transceiving wireless communication signals between a remote, self-contained communications antenna apparatus and a cellular system; and

(b) transceiving wireless communication signals between said cellular system and a communications network.

10